# PSYCHOSOCIAL AND SOCIAL EFFECTS OF HEARING IMPAIRMENT IN VARIOUS STAGES OF LIFE: COUNSELING CONSIDERATIONS FOR AUDIOLOGISTS

Capstone Project

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# ABSTRACT

As audiology continues to evolve as a profession, certain areas of the field that were previously only considered as afterthoughts are now being given more attention. With growing numbers of both children and adults being identified with hearing impairment, audiologists have come to discover and understand the significance and importance of the social and psychosocial effects of hearing impairment. By understanding these effects, audiologists are able to better understand what an individual with hearing impairment and their families are experiencing, and can better provide counseling, support, guidance, and resources.

Hearing impairment has an impact on individuals in all stages of life, from early infancy to older adulthood. In order for audiologists to best be able to help patients of any age, the emotional, social, and psychosocial effects associated with hearing impairment need to be understood. This paper provides basic information regarding the experiences of some hearing impaired individuals and their families at different stages of life, with the intent that audiologists use this information to develop effective counseling strategies and to gain a sense of empathy and appreciation for what hearing impaired individuals experience.

Dedicated to Dr. Alexa Kozak, my mentor and occasional life coach

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# CHAPTER 1

## Introduction

It is estimated that between 1 and 6 of every 1,000 infants born in the United States has some degree of sensorineural hearing loss, and that upwards of 28.6 million Americans have a diagnosed auditory disorder (Kemper and Downs, 2000; Kochkin, 2001). As more states continue to adopt and improve newborn hearing screening programs, and as increasing numbers of adults from the "Baby Boom" generation reach older adulthood, the number of individuals with hearing impairments will only continue to increase in the coming decades.

Audiology has its roots planted in post-WWII America, when soldiers returning from combat and the intense noise of war began to experience acquired hearing loss. In the decades following, research and technology have allowed audiologists and hearing scientists the ability to accurately diagnose and treat hearing impairment in individuals ranging from infancy to very advanced adulthood.

As audiology continues to evolve, light is being shed on areas of the profession that were previously only considered as afterthoughts. However, with growing numbers of both children and adults being identified with hearing impairment, audiologists have come to discover and understand the significance and importance of the social and psychosocial effects of hearing impairment. By understanding these effects, audiologists

are able to better understand what an individual with hearing impairment and their families are experiencing, and can better provide counseling, support, guidance, and resources.

The effects of hearing impairment on language acquisition, communication, and socialization have been well documented. However, the emotional and psychosocial impact hearing impairment has on an individual have received less attention. As a result, audiologists are sometimes unprepared to counsel patients and their families when a diagnosis of hearing impairment is made. Additionally, some audiologists have limited understanding of the effects hearing impairment has on society as a whole. The purpose of this paper is to provide audiologists with basic information regarding the social and, more importantly, the psychosocial effects of hearing impairment at various stages of life. The information provided will help audiologists not only gain an appreciation for the emotional aspects related to hearing impairment, but also be able to incorporate some of this information into their own practice and counseling styles for patients of all ages.

# Chapter 2

## The Impact of Childhood Hearing Loss on the Family Unit

In 1994, the Joint Committee on Infant Hearing released a position statement, which promotes the importance of early identification of young children with hearing impairment, preferably by 3 months of age, with the onset of early intervention beginning shortly after identification (NIH, 1993). Since that time, a majority of states have mandated universal newborn hearing screenings (UNHS), and in most cases, otoacoustic emission and/or automated ABR screenings are completed prior to the neonate being discharged from the hospital.

As a result of newborn hearing screening programs, infants with hearing impairment can be identified within days of birth, and intervention can begin almost immediately. The importance of early identification and intervention of hearing loss has been widely documented. Perhaps most notably, Yoshinaga-Itano et al. (1998) found that deaf and hard-of-hearing infants identified before 6 months of age demonstrated significantly better receptive and expressive language skills than did age-matched peers whose hearing loss was not identified until after 6 months of age. Prior to the

implementation of universal newborn hearing screening programs, the average age of identification of hearing loss was 11 to 19 months for children with known risk factors for hearing loss, and 15 to 19 months for children without known risks (Yoshinaga-Itano et al., 1998).

**Social benefit of early identification of hearing loss**

In addition to the benefits associated with language skills of early-identified hearing-impaired children, several studies have investigated cost-effectiveness of universal newborn hearing screening programs. According to Keren and colleagues (2002), the projected cost per infant screening for a hypothetical state cohort with 80,000 annual births, using an OAE/AABR two-step screening protocol, is $19. While this hypothetical cost per infant may seem high, consider the lifetime societal (local, state, and federal) costs proposed. For each child with hearing loss and normal language as a result of early intervention following a newborn hearing screening, the lifetime cost to society, which factors into account lost productivity, special education, vocational rehabilitation, assistive devices, and medical costs, is $697,500. For each child with hearing loss and delayed language as a result of later identification, the lifetime societal cost jumps to $1,126,300 (Keren et al., 2002).

**Psychosocial impact of hearing impaired children on parents and stories of origin**

It remains clear that early identification and intervention is done in the best interest of the hearing-impaired child. Prior to UNHS programs, hearing loss was often identified after the parent raised concerns about hearing loss when their child did not

meet critical speech and language milestones. Since the widespread implementation of UNHS programs, parents of neonates can be made aware of their child's hearing status early in life, and appropriate intervention can be implemented. From an audiologist's perspective, this notion is critically important, and in a sense, exciting. However, from the perspective of the parents, learning their newborn may have a hearing impairment can be emotionally devastating.

Several studies have investigated how parents react to learning that their child is hearing impaired. Emotional reactions and feelings are sometimes difficult to quantify, so research in this area is not always empirically sound. However, many investigators have come to realization that a great deal of beneficial information can be derived from listening to parents tell their stories of origin. "Stories of origin" is a term used to describe the personal experience narratives in which an individual tells the story about how they were informed of the presence of a hearing impairment, either within themselves, or, more widely-used, in the case of their child (Kovarsky et al., 2004).

Parents' stories of origin have been used to provide insight for audiologists into the feelings and emotions felt by parents when learning of their child's hearing loss, which in turn can be used to tailor counseling skills and effective communicative practices. By listening to these narratives, professionals can take the family's personal experience into account and gain a more complete understanding of the parent's experience (Corcoran et al., 2000).

Since the implementation of UNHS programs, several investigators studying stories of origin have reached similar conclusions. One recurrent theme in stories of origin from parents explains the reason why it is difficult for parents to accept news that

their child has hearing loss. Prior to UNHS, hearing loss was often identified when the parents grew suspicious that their child may have a hearing impairment, most commonly from speech and language delays or behaviors associated with hearing loss. Because of these parental suspicions, a positive diagnosis of hearing loss, in some cases, may have been a relief. Since the implementation of UNHS, however, the identification of newborn hearing impairment is unsolicited, meaning that in most cases, a newborn hearing screening is not requested by the parents and therefore a positive diagnosis is completely unexpected (Kovarsky et al., 2004).

Following an unexpected diagnosis of hearing loss, parents often describe a broad array of emotions, including denial, disappointment, disbelief, surprise, shock, and complete apathy (Corcoran et al., 2000). Parents also report that when starting the process of obtaining services for their child, they were faced with a decentralized and confusing system of care, with multiple care centers located in different parts of town. They report that the information regarding resources for their child was supplied sporadically, and often did not provide answers to their questions. Interestingly, many parents indicate the biggest source of assistance, support, and information was not the audiologist who made the diagnosis, but the parents of other hearing impaired children (Corcoran et al., 2000).

Another conclusion reached by investigators through stories of origin is the impact that professionals, primarily audiologists, and the language they use can have on the parents of a newly identified hearing impaired child. Parents often suggest that if simple explanations of hearing loss and the tests that are being conducted are not provided, misunderstanding or misinterpreting the information is likely (Corcoran et al.,

2000). Additionally, parents suggest that if the information is not understood by the parents, then the parents are not going to ask further questions. When the parents do not ask additional questions regarding the diagnosis, the audiologist assumes the information is understood, and further explanation is not provided. This type of communication breakdown can be avoided if the audiologist presents information using layman's terms in the initial stages following diagnosis. More technical language can be used once parents come to accept and understand their child's hearing impairment, and the initial shock of diagnosis has worn off.

Finally, although not necessarily a common conclusion made by investigators of stories of origin, one comment made by a parent in a story of origin seems particularly insightful. When describing his emotions at the time of diagnosis, the father of a hearing impaired infant suggests that while a diagnosis of hearing impairment is routine for the audiologist, from the parents' point of view, it is devastating (Corcoran et al., 2000).

This parent's viewpoint is one that may not be frequently considered by audiologists. Many children seen by audiologists in their clinics are hearing impaired, and like the father suggests, childhood hearing loss is routine in the eyes of an audiologist. But for a parent of a newly identified child, especially if it is the parents' first child, the diagnosis of hearing loss is anything but routine. Therefore, it is important for the audiologist informing the parents of the diagnosis to put themselves in the place of the parent, and consider the weight of an unsuspected or unfavorable diagnosis.

Stories of origin demonstrate the importance the audiologist plays in the emotional experience parents of hearing impaired children describe. Parent's stories about the range of emotions felt following the diagnosis can help audiologists be

prepared for a variety of reactions. The fact that many parents report the best source of information for intervention and services was other parents of hearing impaired children suggests that audiologists need to be more thorough with providing this critical information. Additionally, this common theme suggests that parents seek support from other parents, and parent support groups, parent mentorship programs, and even child role model programs could provide valuable emotional and social support for parents of hearing impaired children. Finally, stories of origin suggest that audiologists need to be sensitive to the emotional need of the parents when making the diagnosis of hearing impairment, and emotional and psychological support should be provided or appropriate referrals made.

In a recent study by Berg et al. (2008), the authors explore the effect narratives and stories of origin related to hearing loss have on audiology students. The authors suggest that exposure to hearing loss narratives may increase empathy, reflection, professionalism, and trust between an audiologist and an individual with hearing loss (Berg et al., 2008). However, it is suggested that most audiology programs focus on teaching students to convey the technical aspects of an audiologic evaluation, to not focus as much on the unique experiences of the individual or family being evaluated. In order to increase awareness of the emotional aspects of hearing loss and to broaden audiology students' perspectives of the impact of hearing loss, stories of origin or other similar narratives may be of value in an audiology curriculum (Berg et al., 2008).

**Parental Stress Related to Hearing Impairment**

Following an unexpected diagnosis of hearing impairment, the early stages of identification can be one of the most stressful times parents may face. For other parents, stress related to raising a child with hearing impairment may quickly become a regular part of everyday life.

A number of psychological studies have been conducted to investigate levels of parental stress associated with raising a child with a disability. Moreover, the relationship between raising a child with hearing impairment and parental stress levels has also been investigated. According to Beckman, (1991), in general, parents of children with any disability, ranging from significant neurological disorders to hearing loss, generally report greater levels of parental stress than do parents of children without disabilities.

Stress levels of parents of children with hearing impairment are influenced by several specific factors related to the hearing loss. Degree of hearing loss, age of identification (or in some cases, onset) of the hearing loss, language ability of the child, and mode of communication (oral vs. manual) all influence stress levels of parents (Pipp-Siegel et al., 2002). For example, mothers reported increased stress related to communication difficulties and breakdowns as a result of their child's hearing impairment-related language delay. Additionally, Pipp-Siegel et al. found that parents of children with less severe hearing loss reported more stress due to communication difficulties with their child. This somewhat counterintuitive finding may be the result of parents of children with less severe hearing loss simply underestimating the impact of the hearing loss on child functioning. An under-estimation of the impact on communication

of even a mild hearing loss may actually result in more communication difficulty than a severe hearing loss, which in turn may lead to more stress (Pipp-Siegel et al., 2002).

However, it appears not all parents of hearing impaired children experience unwavering stress. In a study by Lederberg and Golbach (2002), mothers of hearing impaired children aged 22 months were shown to have higher levels of parenting-related stress compared with mothers of 22 month-old children with normal hearing and no other disabilities. Interestingly, by the time the children in both groups reached age 3-4 years of age, stress levels of parents with hearing impaired children and normal hearing children were equal. Lederberg and Golbach hypothesize that the change in stress level may be due to an adjustment to the hearing loss, and may be influenced by early intervention programs and parent education on hearing loss.

External factors not directly related to the child's hearing impairment have been shown to affect parental stress levels as well. Pipp-Siegel et al. (2002) suggest that a child with one or more disabilities in addition to hearing loss can lead to greater levels of parental stress, however stress levels may differ according to types of additional disability. Deater-Deckard and Scarr (1996) report a positive correlation between increased levels of overall maternal stress and lower levels of maternal education, although this relationship is not necessarily specific to mothers of children with disabilities. Additionally, Deater-Deckard and Scarr (1996) suggest that family income is also a significant predictor of parental stress, regardless of the health status of the child. Increased social support from partners, friends, colleagues, and the community has been shown to lead to increased levels of personal satisfaction in parents, which in turn appears to lower parental stress levels (Lederberg & Golbach, 2002).

Most parents, regardless of the health status of their child, occasionally experience periods of high stress levels. Many factors can influence parental stress, including income level, social interactions, and personal satisfaction. However, parents of children with hearing impairments are at a higher risk of experiencing high levels of stress, especially following an unexpected diagnosis. Therefore, it is important for audiologists and other health care professionals who work with families with hearing impaired children to be able to recognize signs of high stress in parents, and to provide appropriate referrals to help these parents address their stress.

Audiologists who regularly diagnose children with hearing loss need to be aware of the potential negative impact their diagnosis on the family. At the same time, it is important for the diagnosis to have some degree of impact in order for the parents to comply with recommendations and follow-up. Providing technical information is important, but it is also important for audiologists to be empathetic and understanding of the impact of the diagnosis.

# CHAPTER 3

## Hearing Loss in Adolescence: Forming an Identity

Adolescence is often viewed as a period of transitions and transformations, both physically and emotionally. During this time, individuals become more independent and self-aware (Steinberg, 2005). Adolescence is also a time of identity formation and the solidification of self-perception.

Forming an identity is influenced by many factors, including family, peers, teachers, and the adolescent's own self-perception. This period of the life cycle can be difficult and sometimes confusing. For adolescents with disabilities, including hearing impairment, this time can be even more confusing and difficult than for those without disabilities.

Hearing impairment can take several forms and can have several etiologies. Terms such as hard of hearing and deaf are often used to describe hearing loss. In the present paper, hearing impairment refers to any type, degree, and configuration of hearing loss. The use of the term hearing impairment is used to describe audiological or medical findings that suggest a hearing loss. However, as will be discussed further, not all hearing impaired individuals identify themselves as hearing impaired or deaf.

During adolescence, individuals construct identities that are facilitated by changes in self-perception. The development of identity does not emerge of its own accord, but several influences play a role in an adolescent's identity formation (Leigh & Stinson, 1991). For hearing impaired adolescents, several factors have been found to significantly impact the formation of identity. For many of these individuals, depending on these factors, a choice is made to either form the identity of a hearing impaired person or that of a normal person who happens to have a hearing impairment.

According to Leigh and Stinson (1991), one of the most influential factors of identity formation for hearing impaired adolescents is the educational setting. For hearing impaired children in the United States, two educational settings are available in most geographic areas. Typically before the child begins attending school, the child's parents make the decision to either have their child attend a regular school in a mainstreamed environment, or to attend a school for the hearing impaired. Several factors are taken into account when determining the educational setting for a hearing impaired child, including severity of hearing loss, mode of communication (oral vs. sign language) and the parents' hearing status.

For hearing impaired adolescents, social experiences differ depending on the educational setting with which they are involved (Leigh & Stinson, 1991; Stinson et al., 1996). According to Leigh and Stinson (1991), hearing impaired adolescents in mainstream educational environments report more frequent interactions with normal hearing peers than with other hearing impaired students. Additionally, these students report spending less time with other hearing impaired adolescents simply because there are fewer of them in mainstream schools. Leigh and Stinson also report that hearing

impaired adolescents in mainstream settings typically have better oral and academic skills compared to hearing impaired adolescents in schools for the hearing impaired.

Although it seems that hearing impaired students are better off being placed in mainstream schools, Leigh and Stinson (1991) report that mainstream schools provide less social and emotional satisfaction for hearing impaired adolescents than do schools for the hearing impaired. Foster (1989) reports that mainstreamed hearing impaired adolescents often experience loneliness, rejection, and social isolation.

Experiences in school are reportedly much different for hearing impaired adolescents in schools for the hearing impaired. According to Leigh and Stinson (1991), hearing impaired adolescents are able to frequently interact with their hearing impaired classmates. These students perceive themselves as being more socially competent due to increased participation in social activities with their hearing impaired classmates, which creates higher emotional security (Leigh & Stinson, 1991). Adolescents in schools for the hearing impaired often view the establishment of their relationships with peers as successful, and describe being able to easily find a sense of belonging (Leigh & Stinson, 1991).

Hearing impaired adolescents in mainstream schools often express the need for closer relationships as well as more friends who are hearing impaired (Leigh & Stinson, 1991). However, hearing impaired adolescents do find success in mainstream schools, especially those with access to support services and proficient oral communication skills. According to Leigh and Stinson (1991), hearing impaired adolescents who feel comfortable communicating orally report less feelings of loneliness than those who are less comfortable using speech as the primary mode of communication. Additionally,

students in mainstream schools often have more opportunity to participate in social and extracurricular activities (athletics, academic clubs, student government, etc.) than those who attend schools for the hearing impaired, which typically have fewer students.

Several studies have attempted to assess the impact educational environment plays in the identity formation of hearing impaired adolescents. Israelite et al. (2002) conducted a study of hearing impaired adolescents who have been in both mainstream and hearing impaired educational settings, and used open interviews to investigate the formation of identity of these students. The interviews revealed that the students were given the opportunity to form a social group where they felt accepted and valued. Not only did the students share the differences between their peers in the different settings, but they also discussed the differences in teachers. One student reported having a teacher at the hearing impaired school who encouraged sharing ideas and opinions, which gave the student a sense of confidence. In this study, the students' viewpoint of the mainstream school setting included the perception of a non-supportive environment in which they felt lonely, rejected, misunderstood, discriminated against, or singled out because of their hearing impairment. However, the students also reported feeling more "normal" when in a mainstream setting, even though there were social drawbacks, because they were surrounded by "normal" students.

Israelite et al. (2002) suggest that hearing impaired adolescents need a critical mass of peers with whom they can identify, which is important in establishing strong base of supporting relationships. However, it is important to note that this study included only seven subjects, six of whom were female, ranging in age from 14 to 17 years. Additionally, all of the subjects in this study attended the same hearing impaired and

mainstream schools, so their experiences were not much different. While this study provides some insights into the identity formation of hearing impaired adolescents, including a larger number of subjects from different educational environments would provide a more diverse sample. Also, because identity is something that changes during adolescence and throughout life, it would be interesting to revisit these subjects to see how each of their identities as a hearing impaired person has developed.

For hearing impaired adolescents, the influence of parents and family is a significant aspect of identity formation. Depending on the influence of the family, adolescents tend to either develop an identity as a hearing impaired person or the identity as a normal person with a hearing impairment. According to Weinberg and Sterritt (1986), some parents of hearing impaired children, in order to improve their child's chances of success, encourage their children to appear and behave as normally as possible. Some parents believe that if their child appears "able-bodied", their chances of being accepted by their peers increases.

In addition to parental suggestions to appear normal, the hearing status of the parents of a hearing impaired child also plays an important role in identity formation. Some people who have severe to profound hearing impairments identify themselves as Deaf. For the purpose of clarification, Deaf refers to hearing impaired persons who choose to utilize sign language as opposed to speech as a means of communication, and are associated with a culture of people with little or no residual hearing. Deaf culture has its own cultural rules and behaviors, and those individuals associated with Deaf culture view hearing impairment as normal. For adolescent children of parents who identify

themselves as Deaf, a choice must be made between associating with either the hearing community or the Deaf community (Leigh & Stinson, 1991).

In a study by Weinberg and Sterritt (1986), 111 high school students at a school for the hearing impaired were surveyed to determine the differences in identity among the sample. The authors of the study were interested in investigating how hearing impaired adolescents identify themselves. Based on the surveys the students completed, the investigators labeled each student as "identifies themselves as hearing impaired" or "identifies themselves as hearing", regardless of the severity of hearing impairment.

Based on the results from the surveys, 24% of the students identified themselves as having a hearing impaired identity, 18% identified themselves as having a hearing identity, and 58% had a dual identity of both hearing and hearing impaired. Of those students identifying themselves as hearing, only 25% viewed themselves as having strong peer relationships. 33.3% of the hearing impaired identity students reported having strong peer relationships and 57.8% of those with a dual identity viewed having strong peer relationships.

The results of this study suggest that hearing impaired adolescents who identify themselves in a dual manner have the strongest and most significant peer relationships. The study also suggests that hearing impaired adolescents who take on a hearing identity have much weaker peer relationships. Additionally, this study suggests that those with a hearing identity had consistently poorer outcomes in terms of academic placement, social relationships, and personal adjustment. The authors of this study suggest that it is advisable for hearing impaired adolescents to identify themselves in a dual manner, as both a hearing and a hearing impaired person.

However, the results of this study need to be interpreted with caution. Although it appears that students with a dual identity are the most successful, this may be the case only for this school. Because all of the subjects attended the same school for the hearing impaired, the culture of that school most likely has an influence on how students select their identity. Additionally, each of the subjects was not directly asked what they consider to be their identity, but identities were derived based on the subjects' answers to survey questions.

A study by Kent (2003) investigates the identities of hearing impaired adolescents in mainstream educational settings. Fifty-two hearing impaired adolescents in New Zealand mainstream schools, ranging in age from 11 to 15 years, were given a questionnaire to determine their identity type. The questionnaire was written to ask each subject if the identified themselves as having a hearing disability. According to the results of the questionnaires, the majority of hearing impaired students did not identify themselves as having a hearing disability. The results also indicate that those who do identify themselves as having a hearing disability are more likely to experience feelings of being lonely.

There may be several explanations for the results of this study, which indicate that hearing impaired adolescents who do not identify themselves as hearing impaired feel less lonely. The results also indicate that hearing impaired students who do not identify themselves as hearing impaired also do not identify themselves as having significant features that differ from their hearing peers. Contrary to the suggestions made by Weinberg and Sterritt (1986), Kent suggests hearing impaired adolescents who do not

identify themselves as having a hearing disability are better off socially and emotionally than those who do identify as having a hearing disability.

The results of the study by Kent (2003), like other studies of this nature, needs to interpreted carefully. The questionnaire given to the subjects asks "Do you have a disability?" Although hearing impairment is considered by some to be a disability, most adolescents view their hearing loss as an impairment rather than a disability. Given this information, it is not surprising that many of the hearing impaired adolescents did not identify themselves as having a hearing disability. Had the questionnaire asked "Do you have an impairment?", most would have responded to the affirmative. In the sample, there may have been hearing impaired adolescents who self-identify as hearing impaired who are socially successful and do not feel lonely. Because of the wording of the questionnaire, these subjects may have been missed.

The formation of identity during adolescence is also heavily influenced by one's self-perception. For hearing impaired adolescents, self-perception plays a significant role in the formation of identity. Similar to the formation of identity, hearing impaired adolescents' self-perceptions are influenced by several factors.

According to Jambor and Elliot (2005), hearing impaired adolescents who are surrounded by hearing impaired peers, such as in schools for the hearing impaired, tend to have higher self-esteem. It is hypothesized that hearing impaired adolescents attending schools for the hearing impaired do not have to face potential negative attitudes from hearing peers, which may serve to protect self-esteem (Jambor & Elliot, 2005). However, withdrawal from society into a community of similar others (i.e. hearing

impaired peers) may protect self-esteem, but it also sets social limits (Jambor & Elliot, 2005).

In a study by Kent and Smith (2006), hearing impaired adolescents were interviewed to determine self-perceptions. The results of this study suggest that the biggest factor influencing hearing impaired adolescents' self-perception is the use of hearing aids. This is not entirely surprising, as hearing loss without the use of hearing aids is sometimes referred to as an "invisible disability". The majority of the subjects in this study indicated that they feel "normal" compared to their normally hearing peers. One subject reported that he is like a normal person, and that stereotypical hearing impaired persons "looks retarded, has slightly deformed facial features, stuff like that". This is an interesting response, as it appears that this subject, although hearing impaired, does not view themselves as a typical hearing impaired adolescent, which most likely is done to maintain a positive self-perception.

Another major finding of the subjects who report positive self-perceptions is that they report wearing hearing aids that are not easily visible to others. One subject commented that "no one can see them and they fit right inside your ear". Other subjects indicated that they reduce the visibility of their hearing aids by having long hair, wearing hearing aids that match skin tones, utilizing transparent ear molds, or by simply not wearing their hearing aids at all. Additionally, some subjects viewed curious questioning by peers about their hearing aids or hearing impairment as unwanted teasing or stigmatization.

The study by Kent and Smith (2006), which was conducted in a mainstream school in New Zealand, contained only 16 adolescent subjects. Similar to other studies of

this nature, the small sample size of students who attend the same school may not be representative of all hearing impaired adolescents who wear hearing aids. The school culture and social environment of the community likely influences self-perceptions.

Self-perceptions of hearing impaired adolescents appear to be heavily influenced by the opinions of peers. In a study by Dengerink and Porter (1984), 164 fifth and sixth grade students in Washington viewed slides of photographs of males of the same age wearing hearing aids or glasses. The subjects were asked to rate the appearance and perceived academic achievement ability of each of the students pictured. The results of this study indicate that the subjects gave significant negative ratings of appearance and achievement of those pictured wearing hearing aids. Interestingly, pictures of students wearing glasses were not rated negatively for either category. This suggests that glasses are more socially accepted than hearing aids, and that perceptions of hearing impaired peers are generally negative.

The study by Dengerink and Porter (1984) provides some interesting insight into a possible cause of negative self-perceptions of hearing impaired adolescents. However, this study was published in 1984, when smaller, in-the-ear hearing aids were not readily used. The hearing aids worn by the students in the pictures were larger, behind-the-ear style, which are more visible. Regardless, the major finding of this study is that adolescents tend to have negative views about hearing impaired peers, which undoubtedly has an impact on self-perceptions of hearing impaired adolescents.

Identities formed in adolescence are clearly influenced by a variety of factors. For hearing impaired adolescents, the construction of identity is influenced by self-perception, school environment, family decisions, and peer opinions. The literature

reviewed tends to suggest that hearing impaired adolescents who are in contact with other hearing impaired adolescents are more willing to develop a hearing impaired identity. Hearing impaired adolescents who are mainstreamed tend to be more influenced by their peers, and their self-perceptions are more likely to be negative. Several authors suggest that association with hearing impaired peers provides the best ratings of self-perception.

On the other hand, several studies suggest that mainstreamed hearing impaired adolescents have more opportunities to participate in normal, hearing society. The extent of the literature on this subject is limited, and very little research has been done in the United States. Regardless, more attention needs to be given to hearing impaired adolescents and their experiences, and more research must be conducted to better understand the construction of identities and self-perceptions of this complex population. Additionally, understanding the experiences, thoughts, beliefs, and the formation of identity hearing impaired adolescents will help audiologists implement strategies that will help these individuals maximize social and academic success.

# Chapter 4

## Hearing Loss in Older Adulthood: Social and Theoretical Considerations

In the next several decades, the older adult population in the United States will undergo significant growth as the "baby boom" generation reaches retirement age. It is estimated that by 2040, one out of five persons living in the United States will be over the age of 65, with the most rapid growth of this age group occurring between 2010 and 2030 (Weinstein, 2000). The tremendous growth of the over-65 population will have several implications on a national scale. The landscape of healthcare in the United States will also change dramatically as more people are living longer, healthier lives.

The growing aging population in the coming years will affect many areas of healthcare. According to the 1991 National Health Interview Survey, hearing impairment in the third most prevalent chronic health condition experienced by adults over the age of 65 (Weinstein, 2000). Although estimates vary based on methodology, it is estimated that the prevalence of hearing loss in older adults is approximately 30 percent (Weinstein, 2000). Research has also shown that the prevalence of hearing loss increases with age. 35 percent of people over the age of 75 experience a hearing impairment (Hooyman &

Kiyak, 2008), and 50 percent of people over the age of 85 experience hearing loss (Hooyman & Kiyak, 2008). It is estimated that for every five years of age beyond 65, the risk of experiencing a hearing loss increases by 90 percent (Cruickshanks et al., 1998). Over the age of 60, most people experience a decrease in hearing acuity of 1 decibel per year, which climbs to a decrease of 1.3 decibels per year after the age of 80 (Hooyman & Kiyak, 2008).

As older adults live longer and healthier lives, the likelihood of hearing impairment increases. As an increasing number of older adults begin to experience hearing impairment, audiologists and other healthcare professionals who work with hearing impaired individuals will see an increase in their older adult caseload. While some hearing losses associated with age are surgically correctable, most are sensorineural in pathology and are permanent. Although expensive, hearing aid technology is ever-improving, and successful treatment of hearing loss through the use of hearing aids and other assistive listening devices is a very realistic option for many hearing impaired individuals. Although there will be more older adults in the coming decades, these older adults are expected be more educated compared to older adults in previous generations, and will be capable of making more informed and personalized decisions regarding their healthcare.

The implications of such a large segment of the population experiencing hearing loss not only impact audiologists and healthcare practitioners who deal with hearing impairment, but multiple other aspects of daily living. As one can imagine, communication becomes very difficult in the presence of a hearing loss. The hearing impaired individual may miss important spoken information, and the communication

partner may become frustrated with continually having to repeat themselves or speak at a louder than normal volume. This can lead to strained relationships and varying degrees of stress for all involved parties. Many hearing impaired older adults also report feeling isolated and withdrawn as a result of their difficulty hearing in social situations. Additionally, caregivers, physicians, store clerks, and other support personnel who interact with older adults on a regular basis will be faced with an increasing number of hearing impaired individuals. It is important for these individuals to learn to effectively communicate with older adults with hearing impairment.

The expected increase in the prevalence of hearing loss in the coming years will have significant impact on many people's lives. Understanding the demographics of hearing impaired older adults is not only important for audiologists, but for anyone who will be in contact with an older adult in the future. The implications of an increasing number of hearing impaired older adults will impact the social, emotional, and financial aspects of millions of Americans during the next several decades and beyond.

Age-related hearing loss is described as auditory system dysfunction that cannot be attributed to genetic or pathological conditions, or trauma (Chisolm et al., 2003). Such dysfunctions can be neuronal, vascular, cellular degenerative, or structural in nature (Chisolm et al., 2003). This long accepted definition of age-related hearing loss focuses primarily peripheral changes in the auditory system. Recently, however, a tremendous amount of research has been done to explore the changes in the central auditory processing centers in the brain. Research suggests that biological aging can result in deleterious effects of neuronal circuits in a variety of areas in the brain, including the central auditory system. For older adults with or without normal peripheral hearing,

central auditory changes can result in perceptual deficits in temporal and binaural processing (Chisolm et al., 2003; Pichora-Fuller & Souza, 2003). In more simple terms, this translates to difficulty localizing the source of a sound (i.e. someone talking) and difficulty hearing in background noise. It is beginning to be widely accepted that age-related hearing loss has two components; deterioration of the peripheral auditory structures, and decreased understanding of speech related to decreases in central auditory function (Divenyi et al., 2005).

Dementia is an area of aging that receives a great deal of attention, both in research and the media. A study by Allen et al. (2003) suggests that hearing impairments are common in older adults with dementia, and the provision of a hearing aid can provide some benefit. While there is no evidence suggesting individuals with hearing loss are more likely to experience dementia, hearing impairments are common in older adults, regardless of cognitive status. Therefore, older adults with dementia often have hearing loss, not as a result of dementia, but as a result of the typical biological processes associated with age-related hearing loss. Additionally, the authors make it clear that while a hearing aid will not improve cognitive function in those with dementia, some benefits do exist (Allen et al., 2003). Some characteristics of hearing loss and dementia are similar. Hearing loss can lead to misunderstanding speech, which leads to confusion. Hearing loss is also a cause of social isolation among older adults, which can lead to disorientation (Allen et al., 2003). These characteristics are often symptoms of dementia, especially in the early stages. Allen and colleagues (2003) suggest that hearing loss in the presence of dementia may complicate the situation for both the patient as well as the caregiver. This study suggests that assessments of hearing and hearing aids previously

validated in subjects without dementia also work for those with dementia (Allen et al., 2003). For older adults with dementia and hearing loss, a hearing aid may eliminate unnecessary confusion or disorientation not associated with one's dementia.

In addition to biological aspects of age-related hearing loss, researchers are also investigating the effects of hearing loss on older adults. In a study by Dalton et al. (2003), researchers investigated the impact of hearing loss on quality of life in older adults by measuring perceived impairments of activities of daily living (ADL) and instrumental activities of daily living (IADL). ADLs include basic daily activities, including feeding, bathing, and dressing ones' self. IADLs include more interpersonal activities, including shopping, talking on the telephone, and participating in social activities. In this study, it is reported that 46.7 percent of older adults with a mild hearing loss and 59.1 percent of those with a moderate-to-severe hearing loss report a perceived impairment of IADLs (Dalton et al., 2003). Given that IADLs include several interpersonal activities, it is not surprising that a hearing loss would be associated with a perceived impairment, but the percentages are still quite staggering. What is more interesting, however, is that 14.9 percent of subjects with a mild hearing loss and 27.9 percent of subjects with a moderate-to-severe hearing loss reported perceived impairment in ADLs (Dalton et al., 2003). Although it is not likely that hearing loss is the direct cause of the impaired ADLs, it is possible that hearing loss causes a decrease in self-perceived quality of life. Similar findings were reported by Strawbridge et al. (2000), who suggests hearing impairment in older adults is associated with depression, loneliness, and diminished functional status, all of which may have an effect on perceived ADL and IADL impairment.

Another interesting area of hearing loss in the older adult population receiving some attention is related to personality characteristics of those who seek treatment or intervention. In the case of age-related hearing loss, treatment typically includes the use of a hearing aid. Given the large number of hearing impaired adults, it would be expected that hearing aid usage rates are quite high. However, only approximately 23 percent of hearing impaired adults use hearing aids, despite the known benefits of amplification (Cox et al., 2005).

In order to determine a possible explanation for the small percentage of hearing aid users, Cox et al. (2005) attempted to derive common personality domains or traits among hearing impaired adults over the age of 60 who wore hearing aids. Some of the personality traits assessed include neuroticism, which is associated with negative emotions, hostility, and anxiety, openness, which is associated with variety-seeking and intellectual curiosity, and agreeableness, which is associated with warm-heartedness and sympathy (Cox et al., 2005). The results of the study suggest that hearing aid "seekers", or those who sought intervention for their hearing loss, are less neurotic and open than those who did not, and are more agreeable (Cox et al., 2005). These results suggest that those who initiated intervention were more positive, warm-hearted, practical people. Although this study does not offer solutions to achieving a higher rate of hearing aid usage, it does shed light on the personality differences of older adults.

Recently, there has been a great deal of expansion in the area of investigating hearing loss in older adults. Not only is the research focusing on the biological changes associated with the aging auditory system, but also the age-related changes of the brain. Psychological and emotional characteristics of hearing impaired older adults are being

investigated and better understood. As the older adult population continues to grow, hopefully too will the field of audiology, and the understanding of hearing loss in older adults.

In the broadest of definitions, hearing loss in older adults can be described by referring to the biological mechanisms associated with presbycusis. Understanding the functional changes of the cochlea and auditory processing centers of the brain allow for one to gain an awareness of the changes older adults experience as they begin to lose their hearing in older age. However, most hearing scientists fail to recognize the conceptual perspectives and theories of aging that are crucial in fully understanding the older adult hearing impaired population.

Social theories of aging attempt to provide explanations for the aging process in general through the use of scientific inquiry and observation. Some theories of aging are broad in focus and attempt to explain changes in social relationships that occur in older adulthood. It is suggested by Hooyman and Kiyak (2008) that social theories of aging as a whole are relatively new and less developed compared to biological theories of aging. Hearing science is an area of science dominated by biological theories, and social theories are not widely discussed or developed. However, some existing social theories of aging in general can be used to help explain social and personal changes experienced by older adults with age-related hearing loss.

One social theory of aging that may explain behaviors associated with hearing loss in older adults is disengagement theory. This theory describes the reluctance of older adults to accept inevitable changes associated with aging, and suggests that older adults experience a withdrawal to the loss of prior roles (Hooyman and Kiyak, 2008). It

is important to note that disengagement theory is generally disregarded by most gerontologists. However, some aspects of disengagement theory may be applicable to hearing impaired older adults, especially those who do not seek intervention or treatment. While disengagement theory is discounted by the continuously growing number of older adults who remain employed and socially active, some older adults who experience hearing loss do not remain employed and socially active. There are many reasons why older adults may choose to refrain from seeking treatment for hearing loss. One of which may be the individual's reluctance to accept changes associated with aging. Although disengagement theory discusses inevitable changes of aging, hearing loss can be considered virtually inevitable for many people given that 50 percent of people over the age of 85 experience hearing loss (Hooyman and Kiyak, 2008). (It is of note that this statistic reflects only those individuals who have been diagnosed with hearing loss. In other words, 50% of individuals over 85 will admit to having hearing loss or agree to be tested. Many more likely live out their lives undiagnosed). That being said, disengagement theory may be applicable to older adults who are unwilling to accept the age-related changes in their hearing acuity, and consequently are unable to maintain their prior roles, including employment and social roles. While disengagement theory may not be appropriate in attempting to understand all older adults experiencing hearing loss, it may be useful in understanding those who do not seek intervention.

A social theory of aging that may more accurately explain behaviors associated with age-related hearing loss is the political economy of aging. The political economy of aging can be described as a broad-view analysis of social and structural characteristics which govern how older adults adapt, as well as how social resources are allocated

(Hooyman and Kiyak, 2008). Aspects that shape the political economy of aging include politics, socioeconomics, and public policy. Political economy theorists consider social class, socioeconomic standing, and political constraints to be the primary factors associated with shaping how older adults age (Hooyman and Kiyak, 2008). Additionally, political economy theorists reject biomedical, activity, and disengagement theories of aging, and believe that the major problems faced by older adults are social problems resulting from a capitalist society (Hooyman and Kiyak, 2008). Obviously when attempting to understand age-related hearing loss, one must accept certain aspects of biomedical theories of aging.

While this "wide-angle lens" theory seems to ignore the fact that older adults are unique individuals, some ideas of political economy theorists are applicable to age-related hearing loss in older adults. Although hearing loss in older adults is a biological process, the means with which clinicians provide treatment for hearing loss is a partially economic and political process. The structural factors described by political economy theorists that impact how an older adults age absolutely relate to hearing loss in older adults.

Socioeconomic standing has a tremendous impact on many aspects of the life of an older adult, including hearing loss. If an older adult begins to notice difficulty hearing, as many do, the most logical thing to do would be to see an audiologist and learn about treatment options. For an older adult with high socioeconomic standing, the ability to seek out treatment at a facility of their choice is most likely a realistic option. For an older adult with lower socioeconomic standing, the means to seek out treatment for hearing loss may not be as readily available. Many private insurance companies do not

provide reimbursement for hearing aids or other assistive listening devices. Medicaid and Medicare, in some instances will provide one conventional, analog hearing aid. One analog hearing aid may be beneficial to some older adults, but depending on their degree of hearing loss and their lifestyle, two digital hearing aids with the ability to decrease background noise in the presence of speech would be much more beneficial, yet not realistically obtainable.

Using hearing loss as an example, there are obvious socioeconomic constraints faced by many older adults. The structural societal factors that underlie the political economy of aging limit the opportunities, choices, and experiences of older adulthood. Although it may seem unrealistic that the major problems faced by older adults are socially constructed, institutionalized, and reinforced by economic and public policy (Hooyman and Kiyak, 2008), in many cases, including hearing loss in older adults, they are. However, this theory fails to consider the older adult as an individual, and, aside from socioeconomic classifications, views all older adults in much the same way.

In examining theories of aging, only certain aspects of a few theories have been adequate in providing an explanation for behaviors associated with hearing loss in older adults. Disengagement theory is really only appropriately applied to hearing impaired older adults who fail to seek treatment, and the political economy on aging only considers older adults as a cohort or generic segment of the population, rather than as unique individuals.

Selective optimization with compensation (SOC), however, seems to be superior in providing a framework useful for understanding behaviors associated with hearing loss in older adults. This theory focuses on both constancy and change over the lifespan, and

recognizes that aging is not a uniform process, but that individuals age differently (Baltes & Dickson, 2001). SOC recognizes that an individual has a variety of resources at their disposal at any given time, but these resources are limited. Opportunities and losses arise throughout the lifespan, requiring the individual to make choices about how their resources are allocated in order to reach certain goals (Baltes & Dickson, 2001). Selecting which goals to undertake, optimizing the allocation of resources to achieve those goals, and using compensatory strategies to maintain a certain level of functioning when faced with losses are all aspects of SOC that are unique to each individual (Baltes & Dickson, 2001), and can be applied to a variety of situations, including hearing loss.

SOC provides a framework to investigate behaviors associated with hearing loss in older adults, as it takes into consideration individual differences in the aging process as well as individual differences among availability and allocation of resources, and acknowledges differences in compensatory processes used by older adults, all of which can help hearing scientists better understand hearing loss in older adults.

As the older adult population in the United States increases over the next several decades, many issues regarding this population will begin to emerge. As sociologists, politicians, healthcare providers, and caretakers become more aware of these emerging issues, demographic characteristics of older adults will need to be analyzed on multiple levels.

One demographic characteristic of the growing older adult population that will increasingly be an issue to consider on multiple levels is age-related hearing loss. As the number of older adults increases, so will the number of hearing impaired older adults. Research suggests that 35 percent of people over the age of 75 experience a hearing

impairment (Hooyman & Kiyak, 2008), and 50 percent of people over the age of 85 experience hearing loss (Hooyman & Kiyak, 2008). With such large percentages, it is not surprising that hearing impairment in the third most prevalent chronic health condition experienced by adults over the age of 65 (Weinstein, 2000). As the older adult population in the United States increases, hearing loss in this age group will become an issue on both a personal, psychological level as well as a national, social level.

From a simple micro-oriented viewpoint, hearing loss is a personal problem. Specifically, age-related hearing loss is the result of biological changes in an individual's auditory mechanism. However, hearing impairment in individual older adults needs to be considered beyond just difficulty hearing.

One of the most prevalent consequences of age-related hearing loss in older adults is poor psychological functioning coupled with disruption of social behavior (Heine & Browning, 2002). Older adults with hearing loss report feeling isolated, limited, and depressed as a result of their inability to communicate effectively (Heine & Browning, 2002). Hearing impaired older adults sometimes feel frustrated, embarrassed, and may feel a sense of decreased personal integrity (Heine & Browning, 2002), all of which can result in mood changes and periods of depression. It has been suggested that lack of specific communication strategies, accommodations, and treatment of hearing loss, rather than the hearing loss itself, may result in psychological disturbances (Knutson & Lansing, 1990). This statement suggests that the hearing loss itself is not the cause of personal and social difficulties, but the inability to adapt to and seek assistance for the hearing loss may be the cause. Heine and Browning (2002) suggest that when considering hearing impaired older adults, a key to psychological and interpersonal well-being lies in neither

rejecting assistance completely nor depending excessively on others for assistance in communicating.

It seems quite obvious why it is important to consider the personal implications hearing loss has on older adults. Feelings of isolation and depression can have a severe impact on the well-being of an older adult. Additionally, personal relationships with spouses, children, caregivers, and friends can be strained by one's inability to communicate effectively as a result of a hearing loss.

In addition to the psychological and psychosocial issues faced by older adults with hearing loss, financial issues will become more important as more adults reach older adulthood. Although it seems well-known that the cost of some hearing aids is high, one study examined exactly how much an older adult can expect their age-related hearing loss to cost. Mohr et al. (2000) developed a cohort-survival data analysis model to estimate the lifetime costs of hearing impairment. Adults who acquire hearing loss over the age of 65 can expect their hearing loss to cost $43,000, which includes lost productivity for those still working as well as the cost of assistive devices, such as hearing aids and associated maintenance, and medical costs, including annual audiological evaluations (Mohr et al., 2000). Although the inclusion of lost productivity for those over the age of 65 may skew the cost estimate to the higher end, the result is still a substantial sum of money for most people, but especially for older adults on a fixed income.

To date, much of the literature on hearing loss in older adults has focused on associated biological and psychological implications. The deficiencies of the hearing mechanism and related auditory processing centers of the brain in older adults with hearing loss have been studied for many years, and the effects are discussed from a micro

structural perspective. From a macro social perspective, hearing loss in older adults is less understood.

For such a highly prevalent issue in an increasingly growing demographic of the United States population, one would expect more attention to be given to the sociological implications of age-related hearing loss. It is important to note that, since the implementation of universal newborn hearing screening programs in most states, hearing loss in children has been given a large amount of attention on a macro sociological scale. Several studies of cost-benefit analyses have shown that early identification of hearing loss in infants is beneficial and economical, from both a developmental/psychological standpoint as well as a national healthcare point of view. However, hearing loss in older adults has been given much less attention. Aside from demographic and cohort characteristic information is useful in estimating how many hearing impaired older adults are living in the United States and how those numbers will change in the coming decades, little information regarding the broad-scale sociological implications of hearing loss in older adults is available.

One of the reasons for the general lack of information regarding implications of hearing loss in older adults on society is the large range of individual differences in older adults. Older adults as a cohort have demonstrated variability in perceived changes in health and in how they respond to declines in health (Souza & Hoyer, 1996). For some older adults, perception of a decrease in hearing acuity results in immediately seeking treatment, while for others, a change in hearing is just another result of growing older. There are also large differences in how older adults adapt to their hearing loss, and how their hearing loss impacts their lifestyle and interpersonal functioning (Souza & Hoyer,

1996). Also, some older adults are more successful at adapting to wearing hearing aids than others (Souza & Hoyer, 1996), which makes generalizing hearing aid use difficult. Although it was stated earlier in this paper that there are many psychological and personal implications of hearing loss, these effects are not equally demonstrated in every older adult with hearing loss. The wide variety of differences in older adults with hearing loss may create difficulties in creating generalized sociological trends, which makes determining social implications of age-related hearing loss difficult as well.

Although hearing loss in older adults has not received a great deal of attention on a broad social scale, addressing issues associated with this demographic is inevitable. As more adults begin to reach older-adulthood, an increasing number will experience age-related hearing loss. Although many private insurance companies currently do not cover the cost of hearing aids, some believe this may soon change. As more "baby boomers" reach older-adulthood and begin to experience age-related hearing loss, they will not shy away from contacting their insurance companies and government representatives when forced to pay out-of-pocket for their hearing healthcare. It is the opinion of the author that when the baby-boom generation reaches older-adulthood and begins encountering the associated health issues, hearing loss in older adults will finally become a macro sociological issue. When the baby boom generation reaches older-adulthood, they will dramatically re-shape the healthcare landscape in the United States, and politicians and insurance companies will have no choice but to pay attention and take action.

As a soon-to-be new audiologist nearing the end of my graduate program, I am well aware of the expected population growth of the older adult population in the coming decades. While much of the current body of research on hearing loss in older adults

focuses on the biological and individual psychosocial aspects, researchers are beginning to investigate the social implications of hearing loss in older adults. In my opinion, society's perception of hearing loss, not only in older adults, but in general, will become more understanding and less stigmatic over the next ten years. As society gains a better understanding of hearing loss and available treatments, private and federal health care programs will also change their viewpoint, and more financial support will become available for anyone with hearing loss, including older adults. This change will not only impact audiology as a profession, but others who work with older adults as well. As more adults reach older-adulthood, there will be larger number of older adults with hearing loss. If financial support is made available for these older adults to pursue treatment for their hearing loss (i.e. hearing aids), increasing numbers of older adults will become hearing aid users. Social workers, care givers, and others who work with older adults will need to be educated about hearing loss and basic maintenance of hearing aids.

Based on my limited experiences in audiology, most employees in older adult care facilities are not familiar with hearing aids and are unable to perform simple troubleshooting tasks and hearing aid maintenance. In order for society and individuals working with older adults to gain a better understanding of hearing loss in this population, audiologists need to educate and provide resources and information to a large number of people and various disciplines. Audiologists are the leading authority in hearing healthcare, and it is up to us to make hearing loss better understood.

The social and psychosocial effects of hearing impairment are evident throughout life, and audiologists need to gain an understanding of these implications in order to better

serve their patient population. With the widespread implementation of universal newborn hearing screening programs, hearing impairments can be identified and diagnosed from within a few days to months of birth. Audiologists are now able to begin treatment and intervention immediately after the diagnosis is made, which provides the neonate the opportunity to develop speech and language skills concurrent with those of their peers. However, as a result of the recent ability to diagnose hearing impairment, audiologists must be prepared to counsel the parents of these young patients, many of whom experience a variety of emotions, and provide beneficial information and resources.

As hearing impaired children grow into adolescence, they begin to gain a sense of who they are as a person, and begin to develop a personal identity. For some hearing impaired adolescents, significant measures, such as trying to hide their hearing aids or not wearing them at all, will be taken to avoid being singled-out as hearing impaired. In some cases, parents have difficulty helping their teenager accept their hearing impairment as part of their identity. If audiologists gain an understanding of what a hearing impaired adolescent experiences, they can help hearing impaired teenagers grow into successful young adults.

As more adults of the "Baby Boom" generation reach older adulthood, the importance audiologists play in helping these individuals deal with hearing loss will continue to increase. Audiologists will have a critical role in not only treating and counseling older adults with hearing loss, but also in educating family members, caregivers, and other professionals of the emotional and psychosocial effects of hearing loss.

Hearing impairment has an impact on individuals in all stages of life, from early infancy to older adulthood. In order for audiologists to best be able to help patients of any age, the emotional, social, and psychosocial effects associated with hearing impairment need to be understood. This paper provides basic information on what some hearing impaired individuals and their families experience, with the intent that audiologists use this information to develop effective counseling strategies and to gain a sense of empathy and appreciation for what hearing impaired individuals experience. Additionally, the impact of hearing loss on society can also be considered, and the role audiologists play in the community can be further appreciated.

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